

## Claims

What is claimed is:

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1. A method of evaluating a base station without missing a paging frame, comprising the steps of:  
receiving a first paging frame from a first base station;  
initiating a timing sequence after receiving said first paging frame;  
scanning for system parameters from a second base station; and  
receiving a second paging frame from said first base station.
  2. The method of Claim 1, further comprising the step of halting said scanning step when said system parameters from said second base station are received.
  3. The method of Claim 1, further comprising the step of halting said scanning step once said timing sequence is complete.
  4. The method of Claim 1, wherein said second paging frame is the paging frame for said mobile station which immediately follows said first paging frame.

1 5. The method of Claim 1, wherein the duration of said scanning step is  
2 limited to a predetermined amount of time, said amount of time  
3 being dependent on the amount of time between said first and  
4 second paging frames.

1 *Sub* 6. The method of Claim 1, wherein the duration of said scanning step is  
2 *037* limited to a predetermined amount of time said predetermined  
3 amount of time being dependent on mobile station architecture.

1 7. The method of Claim 1, wherein the duration of said scanning step is  
2 limited to a predetermined amount of time, said amount of time  
3 being dependent on the amount of time required for said mobile  
4 phone to switch from said first receiving step to said scanning  
5 step and from said scanning step to said second receiving step.

1 8. The method of Claim 1, wherein said steps are performed by a mobile  
2 station .

1 9. A method of evaluating a base station without missing a paging frame,  
2 comprising the steps of:

3 *Sub*  
4 *a4* initiating a timing sequence after receiving a first paging frame from a  
first base station;

5 selecting a second base station to be evaluated during said timing  
6 sequence;

7 scanning said second base station transmissions for system  
8 parameters; and

9 receiving a second paging frame from said first base station.

10. The method of Claim 9, further comprising the step of halting said  
scanning step when said system parameters from said second  
base station are received.

11. The method of Claim 9, further comprising the step of halting said  
scanning step once said timing sequence is complete.

12. The method of Claim 9, wherein said second paging frame is the paging  
frame for said mobile station which immediately follows said  
first paging frame.

1 *Sub*  
2 *a5* 13. The method of Claim 9, wherein the duration of said scanning step is  
3 limited to a predetermined amount of time said predetermined  
amount of time being dependent on mobile station architecture.

1 14.The method of Claim 9, wherein the duration of said scanning step is  
2 limited to a predetermined amount of time, said amount of time  
3 being dependent on the amount of time between said first and  
4 second paging frames.

1 15.The method of Claim 9, wherein the duration of said scanning step is  
2 limited to a predetermined amount of time, said amount of time  
3 being dependent on the amount of time required for said mobile  
4 phone to switch from said first receiving step to said scanning  
5 step and from said scanning step to said second receiving step.

1 16.The method of Claim 9, wherein said steps are performed by a mobile  
2 station.

1 17.A system of wireless base station and mobile station communication,  
2 comprising:  
3 first and second base stations transmitting paging frames and system  
4 parameters; and  
5 a mobile station registered with and receiving paging frames from  
6 said first base station;  
7 wherein said mobile station evaluates said second base station based  
8 on transmitted system parameters of said second base  
9 station without missing said paging frames from said  
10 first base station.

1 18.The system of Claim 17, wherein said mobile station can receive said  
2 system parameters of said second base station only when said  
3 first base station is not transmitting said paging frames.

1 19.The system of Claim 17, wherein receipt of a first paging frame triggers  
2 evaluation of said second base station.

1 20.The system of Claim 17, wherein said mobile station stops receiving said  
2 transmissions of said second base station once said system  
3 parameters from said second base station are received.

1 21.The system of Claim 17, wherein said mobile station can receive said  
2 transmissions of said second base station only during a  
3 predetermined amount of time, said predetermined amount of  
4 time being dependent on the architecture of said mobile station.

1 22.The system of Claim 17, wherein said mobile station can receive said  
2 transmissions of said second base station only during a  
3 predetermined amount of time, said predetermined amount of  
4 time being dependent on the amount of time between said  
5 paging frames for said mobile station transmitted by said first  
6 base station.

1 23. The system of Claim 17, wherein said mobile station can receive said  
2 transmissions of said second base station only during a  
3 predetermined amount of time, said amount of time being  
4 dependent on the amount of time required for said mobile  
5 phone to switch from receiving said paging frames transmitted  
6 by said first base station to receiving said system parameters  
7 transmitted by said second base station and back.

1 24. A mobile station, comprising:

2 a control head;

3 a transceiver unit, comprising

4 a transmitter;

5 a receiver; and

6 a logic control assembly at least partially controlled by said  
7 control head; and

8 an antenna assembly connected to said transceiver unit;

9 wherein said logic control assembly controls the operation of said  
10 transceiver unit to scan for and evaluate transmitted  
11 parameters of at least one base station under evaluation  
12 without missing paging frames from a registered base  
13 station.

1 25. The mobile station of Claim 24, wherein receipt of a first paging frame  
2 from said registered base station triggers said transceiver unit  
3 to scan for and evaluate said base station under evaluation.

1 26.The mobile station of Claim 24, wherein said transceiver unit further  
2 comprises memory and said logic control assembly executes  
3 programs in said memory to scan for and evaluate said  
4 transmitted parameters.

1 27.The mobile station of Claim 24, wherein said transceiver unit receives  
2 said parameters only when said registered base station is not  
3 transmitting said paging frames.

1 28.The mobile station of Claim 24, wherein said transceiver unit stops  
2 scanning for said parameters once said parameters are received.

1 29.The mobile station of Claim 24, wherein said transceiver unit can receive  
2 said parameters only during a predetermined amount of time  
3 said predetermined amount of time being dependent on the  
4 architecture of said mobile station.

1 30.The system of Claim 24, wherein said transceiver unit can receive said  
2 parameters only during a predetermined amount of time, said  
3 amount of time being dependent on the amount of time  
4 between said paging frames for said mobile station transmitted  
5 by said registered base station.

31. The system of Claim 24, wherein said transceiver unit can receive said parameters only during a predetermined amount of time, said amount of time being dependent on the amount of time required for said mobile phone to switch from receiving said paging frames transmitted by said registered base station to receiving said parameters transmitted by said base station under evaluation and back.

**THE**